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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,709	10/08/2003	Robert Ernest Knapp	2003P04397 US01	5885
7590 Alexander J. Burke Intellectual Property Department 5th Floor 170 Wood Avenue South Iselin, NJ 08830			EXAMINER RAPILLO, KRISTINE K	
			ART UNIT 3626	PAPER NUMBER
			MAIL DATE 07/14/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/681,709

**Applicant(s)**

KNAPP, ROBERT ERNEST

**Examiner**

KRISTINE K. RAPILLO

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**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/8/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/CI/CD)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 10/8/2003

### DETAILED ACTION

Claims 1 – 24 are pending.

#### *Notice to Applicant*

1. This communication is in response to the amendment submitted April 8, 2008. Claims 1 – 2, 4, 6 – 7, 9 – 11, 13 – 15, 17, 19, 21, and 23 – 24 are amended. **Please note that all claim text amended in claim 1 was not marked with an underline as required. The text of any added subject matter must be shown by underlining the added text to comply with 37 CFR 1.121(c).** Claims 1 – 24 are presented for examination.

#### *Drawings*

2. The objections to the drawings are hereby withdrawn based on the amended submitted April 8, 2008.

#### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 3, 5 – 6, 10 – 11, 13 – 15, 17, 19, 21 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim stating, "said first diagnostic code equals said second diagnostic code" is unclear. The Examiner interprets the specification to read as a first diagnosis code is placed in a diagnostic group and the

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second diagnostic code is assigned based on the priority level of the first diagnostic code. Claim 3 does not clearly claim how or why the first diagnostic code is equal to the second diagnostic code.

The 35 USC 112, second paragraph rejection of claims 1, 5 - 6, 10 - 11, 13 - 14, 15, 17, 19, 21 and 23 are hereby withdrawn based on the amendment submitted April 8, 2008.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 – 3, 5 – 10, 15 - 18, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollard et al., herein after Pollard (U.S. Publication Number 2002/0147616 A1), in view of Dang (U.S. Patent Number 5,835,897).

In regard to claim 1 (Currently Amended), Pollard teaches a system for associating a diagnostic code with a visit record of a patient visit, comprising: receiving a visit record comprising a first diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient derived by using a first diagnosis code set of a first code assignment system (paragraph [0051]);

Pollard fails to explicitly teach an interface processor, a source of rules for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system different from said first diagnostic code a data processor for processing said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code, and an output processor for processing said visit record including said second diagnostic code compatible with said second code assignment system to be suitable for output to a user.

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Dang teaches an interface processor (column 9, lines 2 – 12), a source of rules for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system different from said first diagnostic code (column 23, lines 5 – 54), a data processor for processing said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code (column 23, lines 5 – 54), and an output processor for processing said visit record including said second diagnostic code compatible with said second code assignment system to be suitable for output to a user (column 23, lines 5 - 54).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include an interface processor, a source of rules for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system different from said first diagnostic code a data processor for processing said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code, and an output processor for processing said visit record including said second diagnostic code compatible with said second code assignment system to be suitable for output to a user as taught by Dang, within the system of Pollard, with the motivation of providing a medical claims profiling system which correlates diagnostic codes with Episode Treatment Groups (which are the same or similar to a Disease Related Group) using a computer system (column 5, line 38 through column 6, line 21).

In regard to claim 2 (Currently Amended), Pollard teaches a system for associating a diagnostic code to a visit record of a patient as per claim 1.

Pollard fails to teach a system wherein said data processor processes said rules to determine said second diagnostic code compatible with said second code assignment system using a plurality of information elements in said visit record including at least one of, (a) a primary diagnosis identifier, (b) a medical procedure identifier, (c) a patient age, (d) a patient gender, (e) a secondary diagnosis identifier,

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(f) a service identifier identifying a service performed for a patient, (g) a length of patient stay in a medical facility, (h) an admission date, (i) a visit end date, (j) a diagnosis date and (k) a procedure date .

Dang teaches a system wherein said data processor processes said rules to determine said second diagnostic code compatible with said second code assignment system using a plurality of information elements in said visit record including at least one of, (a) a primary diagnosis identifier, (b) a medical procedure identifier, (c) a patient age, (d) a patient gender, (e) a secondary diagnosis identifier, (f) a service identifier identifying a service performed for a patient, (g) a length of patient stay in a medical facility, (h) an admission date, (i) a visit end date, (j) a diagnosis date and (k) a procedure date (column 18, line 65 through column 19, line 9 and column 21, lines 27 – 39).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a system wherein said data processor processes said rules to determine said second diagnostic code compatible with said second code assignment system using a plurality of information elements in said visit record including at least one of, (a) a primary diagnosis identifier, (b) a medical procedure identifier, (c) a patient age, (d) a patient gender, (e) a secondary diagnosis identifier, (f) a service identifier identifying a service performed for a patient, (g) a length of patient stay in a medical facility, (h) an admission date, (i) a visit end date, (j) a diagnosis date and (k) a procedure date as taught by Dang with the motivation to generate data based on illnesses and relevant patient data to track diagnosis and treatment of a patient (column 9, lines 13 – 27).

In regard to claim 3 (Original), Pollard teaches a system according to claim 1, wherein said first diagnostic code equals said second diagnostic code (paragraphs [0036] and [0037]). The Examiner interprets the first diagnosis to be a code derived from a patient examination and the second code to be a code within the same diagnostic group.

In regard to claim 5 (Original), Pollard teaches a system for associating a diagnostic code to a visit record of a patient visit as per claim 1.

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Pollard fails to teach a system wherein said interface processor receives said visit record wherein said first diagnostic code is a null code, and said data processor processes said visit record, said rules to provide said visit record including said second diagnostic code.

Dang teaches a system wherein said interface processor receives said visit record wherein said first diagnostic code is a null code, and said data processor processes said visit record, said rules to provide said visit record including said second diagnostic code (column 9, lines 41 – 46). Dang teaches a method where an unknown diagnosis is assigned a code so that the diagnosis can be grouped into an episode treatment group (ETG). An ETG is a group of visit data based on inpatient and outpatient visits.

The motivation to combine the teachings of Pollard and Dang is discussed in the rejection of claim 1, and incorporated herein.

In regard to claim 6 (Currently Amended), Pollard teaches a system according to claim 1, wherein said second code assignment system comprises a predetermined system of rules for assigning said second diagnostic code to said visit record based on characteristics of said visit as determined from information contained in said visit record (paragraph [0051]). Pollard fails to explicitly teach a second code assignment system.

Dang teaches a second code assignment system (column 23, lines 5 – 54).

The motivation to combine the teachings of Pollard and Dang is discussed in the rejection of claim 1, and incorporated herein.

In regard to claim 7 (Currently Amended), Pollard teaches a system according to claim 6. Pollard fails to teach a system wherein said second code assignment system comprises at least one of, (a) a CMS Grouper, (b) a Champus Grouper, (c) an All-Patient DRG Grouper and (d) a United States state associated Grouper.

Dang teaches a system wherein said second code assignment system comprises at least one of, (a) a CMS Grouper, (b) a Champus Grouper, (c) an All-Patient DRG Grouper and (d) a United States state associated Grouper (column 9, lines 13 – 19) where Dang discloses DRG groups.

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The motivation to combine the teachings of Pollard and Dang is discussed in the rejection of claim 2, and incorporated herein.

In regard to claim 8 (Original), Pollard teaches a system according to claim 1, wherein said second diagnostic code is derived from a code set including at least one of: (a) ICD-9-CM, (b) ICD-10, (c) HCPCS, (d) NDC, (e) CPT-4, (f) CDPN, (g) SNOMED-RT, (h) UMLS, (i) LOINC (j) "Read Codes", (k) DIN, (l) CDT, (m) NIC, and (n) DRGs Diagnosis Related Groups (paragraph [0051]).

In regard to claim 9 (Currently Amended), Pollard teaches a system according to claim 1. Pollard fails to teach a system wherein said data processor uses said rules, for, identifying whether said first diagnostic code is incompatible with said second diagnosis code set of said second code assignment system and if said first diagnostic code is incompatible, assigning said second diagnostic code to be compatible with said second diagnosis code set of said second code assignment system.

Dang teaches a system wherein said data processor uses said rules, for, identifying whether said first diagnostic code is incompatible with said second diagnosis code set of said second code assignment system and if said first diagnostic code is incompatible, assigning said second diagnostic code to be compatible with said second diagnosis code set of said second code assignment system (column 18, line 54 through column 19, line 9). Dang discloses a system in which the process is discontinued if the diagnosis codes do not match, resulting in invalid code segments.

The motivation to combine the teachings of Pollard and Dang is discussed in the rejection of claim 1, and incorporated herein.

In regard to claim 10 (Currently Amended), Pollard teaches a system according to claim 1, wherein said data processor uses said rules for processing a plurality of visit records and corresponding associated first diagnostic codes using said rules to provide said plurality of visit records (paragraphs [0053]).



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Pollard fails to teach a system including second diagnostic codes compatible with said second diagnosis code set of said second code assignment system by, identifying whether said first diagnostic codes are incompatible with said second diagnosis code set of said second code assignment system and for visit records comprising incompatible codes, assigning second diagnostic codes to be compatible with said second diagnosis code set of said second code assignment system and for visit records comprising compatible codes, using said first diagnostic codes as said second diagnostic codes.

Dang teaches a system including second diagnostic codes compatible with said second diagnosis code set of said second code assignment system by, identifying whether said first diagnostic codes are incompatible with said second diagnosis code set of said second code assignment system and for visit records comprising incompatible codes, assigning second diagnostic codes to be compatible with said second diagnosis code set of said second code assignment system and for visit records comprising compatible codes, using said first diagnostic codes as said second diagnostic codes (column 18, lines 54 through column 19, line 9).

The motivation to combine the teachings of Pollard and Dang is discussed in the rejection of claim 1, and incorporated herein.

In regard to claim 15 (Currently Amended), Pollard teaches a system for associating a diagnostic code to a record of a patient visit, comprising: an interface processor for receiving visit records individually including a first diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient derived by using first diagnosis code of a first code assignment system (paragraph [0051]) and a source of rules for processing individual visit records to determine a second diagnostic code, associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient for individual visit records, compatible with a second diagnosis code set of a second code assignment system (paragraph [0051]).

Pollard fails to teach a data processor for using said rules for processing said visit records and first diagnostic codes to provide visit records including second diagnostic codes compatible with said second diagnosis code set of said second code assignment system by, grouping visit records into clusters

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comprising common characteristics using characteristic information in said visit records and assigning second diagnostic codes compatible with said second diagnosis code set of said second code assignment system, to visit records in said visit record clusters.

Dang teaches a data processor for using said rules for processing said visit records and first diagnostic codes to provide visit records including second diagnostic codes compatible with said second diagnosis code set of said second code assignment system by, grouping visit records into clusters comprising common characteristics using characteristic information in said visit records and assigning second diagnostic codes compatible with said second diagnosis code set of said second code assignment system, to visit records in said visit record clusters (column 9, lines 13 – 23). An Episode Treatment Group (ETG) can be considered a cluster of patient information (including signs, symptoms, age, gender, etc.). A cluster, as defined by Dang, is a group of services (column 20, lines 53 – 58).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a data processor for using said rules for processing said visit records and first diagnostic codes to provide visit records including second diagnostic codes compatible with said second diagnosis code set of said second code assignment system by, grouping visit records into clusters comprising common characteristics using characteristic information in said visit records and assigning second diagnostic codes compatible with said second diagnosis code set of said second code assignment system, to visit records in said visit record clusters as taught by Dang, within the system of Pollard, with the motivation of providing an objective means for measuring and comparing health care services, including diagnosis (column 6, lines 13 – 21).

In regard to claim 16 (Original), Pollard teaches a system for associating a diagnostic code to a visit record of a patient as per claim 15.

Pollard fails to teach a system wherein said data processor processes said rules to determine said second diagnostic code compatible with said second assignment system using a plurality of information elements in said visit record including at least one of, (a) a primary diagnosis identifier, (b) a medical procedure identifier, (c) a patient age, (d) a patient gender, (e) a secondary diagnosis identifier, (f) a

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service identifier identifying a service performed for a patient, (g) a length of patient stay in a medical facility, (h) an admission date, (i) a visit end date, (j) a diagnosis date and (k) a procedure date .

Dang teaches a system wherein said data processor processes said rules to determine said second diagnostic code compatible with said second assignment system using a plurality of information elements in said visit record including at least one of, (a) a primary diagnosis identifier, (b) a medical procedure identifier, (c) a patient age, (d) a patient gender, (e) a secondary diagnosis identifier, (f) a service identifier identifying a service performed for a patient, (g) a length of patient stay in a medical facility, (h) an admission date, (i) a visit end date, (j) a diagnosis date and (k) a procedure date (column 18, line 65 through column 19, line 9 and column 21, lines 27 – 39).

The motivation for combining the teachings of Pollard and Dang is discussed in the rejection of claim 2, and incorporated herein.

In regard to claim 17 (Currently Amended), Pollard teaches a method for associating a diagnostic code to a record of a patient visit, comprising the activities of: receiving a visit record comprising a first diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient derived by using a first diagnosis code set of a first code assignment system (paragraph [0051]).

Pollard fails to teach a method comprising the activities of retrieving rules for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system; processing said visit record and said first diagnostic code using rules to provide said visit record including said second diagnostic code; and initiating communication of said visit record including said second diagnostic code compatible with said second diagnosis code set of said second code assignment system to a destination system.

Dang teaches a method comprising the activities of retrieving rules for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code

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assignment system (column 23, lines 5 – 54); processing said visit record and said first diagnostic code using rules to provide said visit record including said second diagnostic code (column 23, lines 5 – 54); and initiating communication of said visit record including said second diagnostic code compatible with said second diagnosis code set of said second code assignment system to a destination system (column 23, lines 5 – 54).

The motivation to combine the teachings of Dang and Pollard is discussed in the rejection of claim 1, and incorporated herein.

In regard to claim 18 (Original), Pollard teaches a method of associating a diagnostic code to a record of a patient visit as per claim 17.

Pollard fails to teach a storage medium containing computer readable instructions for performing said activities of the method of claim 17.

Dang teaches a storage medium according to claim 19 containing computer readable instructions for performing said activities of the method of claim 19 (column 20, lines 1 – 13).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a storage medium according to claim 19 containing computer readable instructions as taught by Dang with the motivation of providing a computer implemented medical profiling system (column 5, lines 37 – 39).

In regard to claim 24 (Currently Amended), Pollard teaches the visit record comprising a first diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient created by a first diagnosis code set of a first code assignment system (paragraph [0051]).

Pollard fails to teach a machine-readable medium having stored thereon: Instructions adapted to process a visit record using at least one of a set of rules to provide the visit record comprising a second diagnostic code association with data indicating at least one of, a reason for a patient visit and treatment provided to a patient (paragraph [0051]); and the set of rules adapted to process the visit record to

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determine the second diagnostic code compatible with a second diagnosis code set of a second code assignment system comprising information adapted to derive a diagnostic code set.

Dang teaches a machine-readable medium (column 20, lines 1 – 13) having stored thereon: Instructions adapted to process a visit record using at least one of a set of rules to provide the visit record comprising a second diagnostic code association with data indicating at least one of, a reason for a patient visit and treatment provided to a patient (column 23, lines 5 - 54); and the set of rules adapted to process the visit record to determine the second diagnostic code compatible with a second diagnosis code set of a second code assignment system comprising information adapted to derive a diagnostic code set (column 23, lines 5 – 54).

The motivation to combine the teachings of Pollard and Dang is discussed in the rejection of claim 1, and incorporated herein.

7. Claims 4, 11 – 14, and 19 – 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pollard and Dang above, and further in view of Cave et al., herein after Cave (U.S. Patent Number 5,970,463).

In regard to claim 4 (Currently Amended), Pollard teaches a system for associating a diagnostic code to a visit record of a patient as per claim 1.

Pollard fails to teach a system wherein said rules include sets of rules associated with particular time periods of validity for processing said visit record to determine said second diagnostic code compatible with said second diagnosis code set of said second code assignment system valid during a particular time period, and an individual set of rules has a time period of validity determined by a start date and an end date, and, data processor processes said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code valid for a particular time period encompassing a date of said visit.

Dang teaches an individual set of rules has a time period of validity determined by a start date and an end date (column 19, lines 3 – 9).

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Dang fails to teach a system wherein sets of rules associated with particular time periods of validity for processing said visit record to determine said second diagnostic code compatible with said second diagnosis code set of said second code assignment system valid during a particular time period (column 6, lines 42 – 54) and said data processor processes said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code valid for a particular time period encompassing a date of said visit.

Cave teaches sets of rules associated with particular time periods of validity for processing said visit record to determine said second diagnostic code compatible with said second diagnosis code set of said second code assignment system valid during a particular time period (column 6, lines 42 – 54) and said data processor processes said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code valid for a particular time period encompassing a date of said visit (column 7, lines 63 – 67 through column 8, line 11).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a system wherein sets of rules associated with particular time periods of validity for processing said visit record to determine said second diagnostic code compatible with said second diagnosis code set of said second code assignment system valid during a particular time period and said data processor processes said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code valid for a particular time period encompassing a date of said visit as taught by Cave, within the system of Pollard and Dang, with the motivation of providing a tool to process and categorize diagnostic codes over time to accurately assess cost and efficiency (column 3, line 63 through column 4, line 57).

In regard to claim 11 (Currently Amended), Pollard teaches a system for associating a diagnostic code to a record of a patient visit, comprising an interface processor for receiving a visit record comprising a first diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient derived by using a first diagnosis code set of a first code assignment system (paragraph [0051]).

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Pollard fails to teach a source of sets of rules associated with particular time periods of validity, for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system valid during a particular time period; a data processor for processing said visit record and said first diagnostic code using said sets of rules to provide said visit record including said second diagnostic code, said second diagnostic code being valid for a particular time period encompassing a date of said visit; and an output processor for initiating communication of data, representing said visit record and said second diagnostic code compatible with said second diagnosis code set of said second code assignment system, to a destination system in response to a command.

Dang teaches an output processor for initiating communication of data, representing said visit record and said second diagnostic code compatible with said second diagnosis code set of said second code assignment system, to a destination system in response to a command (column 9, lines 1 – 12).

Dang fails to teach a source of sets of rules associated with particular time periods of validity, for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second assignment system valid during a particular time period and a data processor for processing said visit record and said first diagnostic code using said sets of rules to provide said visit record including said second diagnostic code, said second diagnostic code being valid for a particular time period encompassing a date of said visit.

Cave teaches a source of sets of rules associated with particular time periods of validity, for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second assignment system valid during a particular time period (column 6, lines 42 – 54) and a data processor for processing said visit record and said first diagnostic code using said sets of rules to provide said visit record including said second diagnostic code, said second diagnostic code being valid for a particular time period encompassing a date of said visit (column 7, line 63 through column 8, line 11).

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The motivation to combine the teachings of Pollard, Dang and Cave is discussed in the rejection of claim 4, and incorporated herein.

In regard to claim 12 (Original), Pollard teaches a system as per claim 11.

Pollard fails to teach rules associated with particular time periods of validity for processing the visit record to determine the second diagnostic code compatible with the second assignment system valid during a particular time period, an individual set of rules with a time period of validity determined by a start and end date, and a data processor that processes the visit record and first diagnostic code using rules to provide the visit record including second diagnostic code valid for a particular time period encompassing a date of visit.

Dang teaches an individual set of rules has a time period of validity determined by a start date and an end date (column 19, lines 3 – 9).

Dang fails to teach the rules associated with particular time periods of validity for processing said visit record to determine said second diagnostic code compatible with said second assignment system valid during a particular time period and a data processor that processes said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code valid for a particular time period encompassing a date of said visit.

Cave teaches rules associated with particular time periods of validity for processing said visit record to determine said second diagnostic code compatible with said second assignment system valid during a particular time period (Cave, column 6, lines 42 – 54) and a data processor that processes said visit record and said first diagnostic code using said rules to provide said visit record including said second diagnostic code valid for a particular time period encompassing a date of said visit (Cave, column 7, line 63 through column 8, line 11).

The motivation for combining the teachings of Pollard, Cave, and Dang is discussed in the rejection of claim 4, and incorporated herein.

In regard to claim 13 (Currently Amended), Pollard teaches a system as per claim 11.



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Pollard fails to teach a plurality of sets of rules for processing said visit record and said first diagnostic code, for processing said visit record to determine said second diagnostic code compatible with said second diagnosis code set of said second code assignment system valid during the particular time period; and the data processor for processing said received record and said first diagnostic code using said sets of rules to provide said visit record including said second diagnostic code, said second diagnostic code being valid for a particular time period encompassing a date of said visit.

Dang teaches the data processor for processing said received record and said first diagnostic code using said sets of rules to provide said visit record including said second diagnostic code, said second diagnostic code being valid for a particular time period encompassing a date of said visit (column 20, lines 21 – 29) where Dang's invention can include both first and second diagnosis codes.

Dang fails to teach a plurality of sets of rules for processing said visit record and said first diagnostic code, for processing said visit record to determine said second diagnostic code compatible with said second diagnosis code set of said second code assignment system valid during the particular time period.

Cave teaches a plurality of sets of rules for processing said visit record and said first diagnostic code, for processing said visit record to determine said second diagnostic code compatible with said second diagnosis code set of said second code assignment system valid during the particular time period (column 4, lines 36 – 40 and column 7, line 63 through column 8, line 11).

The motivation for combining the teachings of Pollard, Cave, and Dang is discussed in the rejection of claim 4, and incorporated herein.

In regard to claim 14 (Currently Amended), Pollard teaches a system for associating a diagnostic code to a record of a patient visit, comprising: an interface processor for receiving a visit record (paragraph [0051].

Pollard fails to teach a source of sets of rules associated with particular time periods of validity, for processing said visit record to determine said diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a diagnosis code set of a code assignment system valid during a particular time period, a data processor for processing said visit

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record using said sets of rules to provide said visit record including said diagnostic code, said diagnostic code being valid for a particular time period encompassing a date of said visit, and an output processor for initiating communication of data, representing said visit record and said diagnostic code compatible with said diagnosis code set of said code assignment system, to a destination system in response to a command.

Dang teaches an output processor for initiating communication of data, representing said visit record and said diagnostic code compatible with said a diagnosis code set of a code assignment system, to a destination system in response to a command (column 9, lines 1 – 12).

Dang fails to teach a source of sets of rules associated with particular time periods of validity, for processing said visit record to determine said diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a diagnosis code set of a code assignment system valid during a particular time period and a data processor for processing said visit record using said sets of rules to provide said visit record including said diagnostic code, said diagnostic code being valid for a particular time period encompassing a date of said visit.

Cave teaches a source of sets of rules associated with particular time periods of validity, for processing said visit record to determine said diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a diagnosis code set of a code assignment system valid during a particular time period (column 6, lines 42 – 54) and a data processor for processing said visit record using said sets of rules to provide said visit record including said diagnostic code, said diagnostic code being valid for a particular time period encompassing a date of said visit (column 7, lines 63 through column 8, line 11).

The motivation to combine the teachings of Pollard, Dang and Cave is discussed in the rejection of claim 4, and incorporated herein.

In regard to claim 19 (Currently Amended), Pollard teaches a method for associating a diagnostic code to a record of a patient visit, comprising the activities of: Receiving a visit record comprising a first diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment

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provided to a patient derived by using a first diagnosis code set of a first code assignment system (paragraph [0051]).

Pollard fails to teach a system of retrieving sets of rules associated with particular time periods of validity, for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system valid during a particular time period, processing said visit record and said first diagnostic code using said sets of rules to provide said visit record including said second diagnostic code, said second diagnostic code being valid for a particular time period encompassing a date of said visit, and initiating communication of data, representing said visit record and said second diagnostic code compatible with said second diagnosis code set of said second code assignment system, to a destination system in response to a command.

Dang teaches initiating communication of data, representing said visit record and said second diagnostic code compatible with said second diagnosis code set of said second code assignment system, to a destination system in response to a command column 9, lines 1 – 12).

Dang fails to teach a system of retrieving sets of rules associated with particular time periods of validity, for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system valid during a particular time period and processing said visit record and said first diagnostic code using said sets of rules to provide said visit record including said second diagnostic code.

Cave teaches a system of retrieving sets of rules associated with particular time periods of validity, for processing said visit record to determine a second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system valid during a particular time period (column 6, lines 42 – 54) and processing said visit record and said first diagnostic code using said sets of rules to provide said visit record including said second diagnostic code (column 7, line 63 through column 8, line 11).

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The motivation to combine the teachings of Pollard, Dang and Cave is discussed in the rejection of claim 4, and incorporated herein.

In regard to claim 20 (Original), Pollard teaches a system for associating a diagnostic code to a record of a patient visit as per claim 19.

Pollard fails to teach storage medium containing computer readable instructions for performing said activities of the method of claim 19.

Dang teaches a storage medium containing computer readable instructions for performing said activities of the method of claim 19 (column 20, lines 1 – 13).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a storage medium according to claim 19 containing computer readable instructions as taught by Dang with the motivation of providing a computer implemented medical profiling system (column 5, lines 37 – 39).

In regard to claim 21 (Currently Amended), Pollard teaches a method for associating a diagnostic code to a record of a patient visit, comprising the activities of: receiving a visit record comprising a first diagnostic code, associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient said first diagnostic code derivable from a first diagnosis code set of first code assignment system (paragraph [0051]).

Pollard and Dang fail to teach retrieving sets of rules associated with particular time periods of validity, for processing said visit record to determine a second diagnostic code, said second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system valid during a particular time period, processing said visit record using said sets of rules to provide said visit record including said second diagnostic code, said second diagnostic code being valid for a particular time period encompassing a date of said visit, and initiating communication of data, representing said visit

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record and said second diagnostic code compatible with said assignment system, to a destination system in response to a command.

Cave teaches retrieving sets of rules associated with particular time periods of validity, for processing said visit record to determine a second diagnostic code, said second diagnostic code associated with data indicating at least one of, a reason for a patient visit and treatment provided to a patient compatible with a second diagnosis code set of a second code assignment system valid during a particular time period (column 6, lines 42 – 54) and processing said visit record using said sets of rules to provide said visit record including said second diagnostic code, said second diagnostic code being valid for a particular time period encompassing a date of said visit (column 7, line 63 through column 8, line 11).

The motivation to combine the teachings of Pollard, Dang and Cave is discussed in the rejection of claim 4, and incorporated herein.

In regard to claim 22 (Original), Pollard teaches a method for associating a diagnostic code to a record of a patient visit as per claim 21.

Pollard fails to teach obtaining a time dependent validity indicator relatable to the sets of rules, the time dependent validity indicator having a start date and an end date and testing said visit record comprising a first diagnostic code assignment date to verify that the first diagnostic code assignment date falls between the time dependent validity indicator start date and the time dependent validity indicator end date.

Dang teaches obtaining a time dependent validity indicator relatable to the sets of rules, the time dependent validity indicator having a start date and an end date (column 19, lines 13 – 19) and testing said visit record comprising a first diagnostic code assignment date to verify that the first diagnostic code assignment date falls between the time dependent validity indicator start date and the time dependent validity indicator end date (column 20, lines 23 – 28).

The motivation for combining the teachings of Pollard and Dang is discussed in the rejection of claim 4, and incorporated herein.

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In regard to claim 23 (Currently Amended), Pollard teaches the method of claim 21.

Pollard fails to teach grouping said visit record into a cluster having common characteristics using characteristic information in said visit record and providing said second diagnostic code compatible with the second code assignment system, corresponding to the visit record in the visit record cluster.

Dang teaches providing said second diagnostic code compatible with the second code assignment system, corresponding to the visit record in the visit record cluster (column 20, line 62 through column 21, line 6).

Dang fails to teach grouping said visit record into a cluster having common characteristics using characteristic information in said visit record.

Cave teaches grouping said visit record into a cluster having common characteristics using characteristic information in said visit record (column 6, lines 33 – 41).

The motivation to combine the teachings of Pollard, Dang and Cave is discussed in the rejection of claim 4, and incorporated herein.

### ***Response to Arguments***

8. Applicant's arguments filed April 8, 2008 have been fully considered but they are not persuasive. Applicant's arguments will be addressed herein below in the order in which they appear in the response filed.

In response to Applicant argument, it is respectfully submitted that the Examiner has applied new passages and new citations to the amended claims. The Examiner notes that the amended limitations were not in the previously pending claims as such. Applicant's remarks with regard to the application of the Pollard, Dang, and Cave references to the amended limitations are addressed in the above office action.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTINE K. RAPILLO whose telephone number is (571)270-3325. The examiner can normally be reached on Monday to Thursday 6:30 am to 4 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Luke Gilligan can be reached on 571-272-6770. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KKR

/Robert Morgan/  
Primary Examiner, Art Unit 3626